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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,948	01/23/2006	Zaihui Zhang	540057.418USPC	6733
500 7590 09/28/2009 SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVE SUITE 5400 SEATTLE, WA 98104				
EXAMINER STOCKTON, LAURA LYNNE				
ART UNIT		PAPER NUMBER		
1626				
MAIL DATE		DELIVERY MODE		
09/28/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/521,948

**Applicant(s)**

ZHANG ET AL.

**Examiner**

Laura L. Stockton

**Art Unit**

1626

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-6, 14-20, 22-24, 27, 29 and 77-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29, 77, 81 and 82 is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 14-16, 22-24 and 27 is/are rejected.
- 7) ☒ Claim(s) 3, 6, 17-20 and 78-80 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Claims 1, 3-6, 14-20, 22-24, 27, 29 and 77-82 are pending in the application.**

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 4, 2009 has been entered.

***Election/Restrictions***

Applicant's election with traverse of Group I (claims 1-24, 27, 29 and 77-82 - drawn to products of

formula (1)) in the reply filed on August 22, 2008 was acknowledged in a previous Office Action. The requirement was deemed proper and therefore made FINAL in a previous Office Action.

Claims 30, 31, 34-37, 39-52 and 83-89 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 22, 2008. Claims 30, 31, 34-37, 39-52 and 83-89 have been cancelled per the Amendment filed February 25, 2009.

Rejections made in the previous Office Action that do not appear below have been overcome by Applicant's amendments to the claims. Therefore, arguments pertaining to these rejections will not be addressed.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 14-16 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by:

a) the compound of CA Registry No. 302575-58-2 {indexed in the Registry file on STN November 13, 2000};

d) Gorbulyenko et al. {Khimiya Geterotsiklicheskikh Soedinenii (1994), (4), pages 464-471} - see Compound XVII on page 465 (CA Registry No. 163126-67-8) or pages 4 and 19 of provided English translation of Gorbulyenko et al.; or

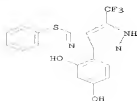
e) Nawwar et al. {Collection of Czechoslovak Chemical Communications (1995), 60(12), pages 2200-2208} - see Compound XI on pages 2201, 2204 and 2205.

Each of the above cited prior art disclose at least one compound that is embraced by the instant claimed invention. Therefore, the instant claimed invention is anticipated by each of the above cite prior art.

### ***Response to Arguments***

Applicant's arguments filed September 4, 2009 have been fully considered. Applicant argues that the claims, as amended, are not anticipated by the compound of CA Registry No. 302575-58-2 (reproduced below).

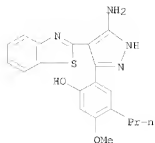
L5 ANSWER 13 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 302575-58-2 REGISTRY  
RD Entered STN: 13 Nov 2000  
CN 1,3-Benzenediol, 4-[4-(2-benzothiazolyl)-5-(trifluoromethyl)-1H-pyrazol-3-yl]- (CA INDEX NAME)  
NF C17 H10 F3 N5 O2 S  
SR Chemical Library  
Supplier: Otava  
LC STN File: CHEMCATS



In response, the compound of CA Registry No. 302575-58-2 is embraced by currently amended claim 23 when the instant  $R^1$  represents hydrogen; the instant  $R^2$  represents heteroalkyl (i.e.,  $CF_3$ ); the instant  $R^3$  represents hydrocarbyl (dihydroxyphenyl); and  $R^4$  represents hydrogen. Therefore, the compound of CA Registry No. 302575-58-2 does anticipate the currently amended claim 23.

Applicant argues that Gorbulenکو et al. do not anticipate the current amended claims. In response, Compound XVII (CA Registry No. 163126-67-8 - reproduced below) in Gorbulenکو et al. on pages 4 and 19 of the English translation is embraced by claims 1, 4, 5, 14, 15, 16 and 22-24 when the instant  $R^1$  represents hydrogen; the instant  $R^2$  represents amino; the instant  $R^3$  represents hydrocarbyl (which embrace a substituted phenyl - see instant claim 15); and  $R^4$  represents hydrogen.

RN 163126-67-8 CAPLUS  
CN Phenol, 2-[5-amino-4-(2-benzothiazolyl)-1H-pyrazol-3-yl]-5-methoxy-4-propyl- (CA INDEX NAME)



Therefore, Gorbulenکو et al. do anticipate the instant current amended claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aotsuka et al. {U.S. Pat.



6,136,831} and Huang et al. {U.S. Pat. 4,269,846}, each taken alone.

***Determination of the scope and content of the prior art (MPEP  
§2141.01)***

Applicant claims pyrazolylbenzothiazole compounds. **Aotsuka et al.** (see entire document; particularly columns 2-6, 9 and 10; and especially the compound in column 3, lines 66-67) and **Huang et al.** (see entire document; particularly columns 1, 3 and 4; and especially the 14<sup>th</sup> compound listed in the table in column 3 and Example 9 in column 9) each teach pyrazolylbenzothiazole compounds that are structurally similar to the instant claimed compounds.

***Ascertainment of the difference between the prior art and the claims  
(MPEP §2141.02)***

The difference between the compounds of Aotsuka et al. and the compounds instantly claimed is that the instant claimed compounds are generically described in the prior art.

The difference between the compounds of Huang et al. and the compounds instantly claimed is that the pyrazole ring is attached to the 2-position of benzothiazole ring at the 3-position of the pyrazole ring instead of the 4-position as instantly claimed.

***Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)***

The indiscriminate selection of "some" among "many" is *prima facie* obvious, In re Lemin, 141 USPQ 814 (C.C.P.A. 1964). The motivation to make the claimed compounds derives from the expectation that structurally similar compounds would possess similar activity (e.g., an anti-inflammatory).

Further, position isomers are a basic form of close "structural isomers." MPEP 2144.09, second paragraph, states, "Compounds which are position isomers ... are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties." Therefore, nothing unobvious is seen in substituting the known

claimed isomer for the structurally similar isomer, as taught by Huang et al., since such structurally related compounds suggest one another and would be expected to share common properties absent a showing of unexpected results. In re Norris, 84 USPQ 458 (1950).

One skilled in the art would thus be motivated to prepare pyrazolylbenzothiazole products embraced by Aotsuka et al., or alternatively positional isomers as taught by Huang et al., to arrive at the instant claimed products with the expectation of obtaining additional beneficial products which would be useful in treating, for example, inflammation. The instant claimed invention would have been suggested to one skilled in the art and therefore, the instant claimed invention would have been obvious to one skilled in the art.

***Allowable Subject Matter***

Claims 3, 6, 17-20 and 78-80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 29, 77, 81 and 82 are allowed over the art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura L. Stockton whose telephone number is (571) 272-0710. The examiner can normally be reached on Monday-Friday from 6:00 am to 2:30 pm. If the examiner is out of the Office, the examiner's supervisor, Joseph McKane, can be reached on (571) 272-0699.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

The Official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

/Laura L. Stockton/  
Laura L. Stockton  
Primary Examiner, Art Unit 1626  
Work Group 1620  
Technology Center 1600

September 25, 2009